Isostatic Press (IP)

靜水圧プレスは成形される製品にすべての方向で圧力が均一に伝えられる流体の原理を利用した設備です.
すなわちセラミック, 金属などの粉末を一次に成形して, 柔軟性を持つモールドに入れて高圧の流体を利用して 高圧で成形をする方法をいいます.

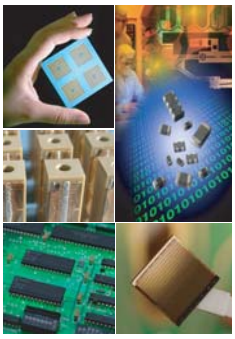
IP(Isostatic Pressing) 作動原理

Features

- 圧力が均一に分布
- 精密な収縮制御
- 製品の均一な熱伝達
- 運転中製品の回転不必要
- 製品のEdge Trimming不必要
- 製品のEdge Rounding現象未発生
- 製品のCamber現象未発生

Application

- Hybrid Chips
- MLCC(Multi-layer Ceramic Capacitors)
- Multilayer PZT(Piezo Actuators)
- Bluetooth Components
- Fuel Cells
- Medical Electronics & Implants
- LTCCs(Low Temperature Confired Ceramics)
- Varistors
- Other Laminated Electronic Components
- Food High Pressure Processing



Pin Type

Yoke Type

Specification

Type		CIPS	CIPL	CIPP
Products				
Vessel Size	Internal Dia.	ϕ 50 ~ 80 mm	ϕ 100 ~ 200 mm	ϕ 250 ~ 350 mm
	Internal length	150 ~ 200 mm	260 ~ 570 mm	650 ~ 1550 mm
Max. Pressure		700 Mpa	700 Mpa	700 Mpa
Material		- Alloy Steel/ Stainless Steel	- Alloy Steel/ Stainless Steel	- Alloy Steel/ Stainless Steel
Closure Type		- Pneumatic Actuated Pin Closure Type or Manual Type - Up & Down Lift - Top Cover Sealing : O-ring & Metal Backup	- Pneumatic Actuated Pin Closure Type or Quick Close & Yoke Flame - Up & Down Lift - Top Cover Sealing : O-ring & Metal Backup	- Pneumatic Actuated Pin Closure Type or Quick Close & Yoke Flame - Up & Down Lift - Top Cover Sealing : O-ring & Metal Backup
High Pressure Pump		- 1 Step Air Driven Liquid Pump	- 1 Step Air Driven Liquid Pump	- 2 Step Air Driven Liquid Pump · 1st Low Pressure Pump (Air Driven Type) · 2nd High Pressure Pump (Air Driven Type or Hydraulic Intensifire Type)
Control		- Touch Screen & PLC - Valve Control : Air Operating & Auto Air Vent & Manual - Set Control : Pressure, Time, Alarm	- Touch Screen & PLC - Valve Control : Air Operating & Auto Air Vent & Manual - Set Control : Pressure, Time, Alarm	- Touch Screen & PLC - Valve Control : Air Operating & Auto Air Vent & Manual - Set Control : Pressure, Time, Alarm

＊ 顧客の要求によって変更可能です

工正による分類

Type	Pressure	Temperature
CIP (Cold Isostatic Press)	400 MPa	~ 30 ℃
HIP (Hot Isostatic Press)	200 MPa	~ 2000℃
WIP (Warm Isostatic Press)	400 MPa	~ 120 ℃
FIP (Food Isostatic Press)	700 MPa	Room Temperature